

**P001**

**Abstract Withdrawn**

**P002**

**Bearing Capacity of Subchondral Bone/Subchondral Bone Replacement Co-regulates the Quality of Cartilage Matrix**

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**P003**

**A Functional Role of PHOSPHO1 in mineralisation during chick limb development.**

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**P004**

**Bearing Capacity of Subchondral Bone/Subchondral Bone Replacement Co-regulates the Quality of Cartilage Matrix**

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**P005**

**An analysis of orbital cartilage development**

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**P006**

**The role of Gas6/Axl signalling in chondrocyte differentiation during endochondral ossification**

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**P007**

**The expression of FGF23 signalling cascade components in growth plate chondrocytes**

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**P008**

**The Inhibitory Role of Suppressor of Cytokine Signalling-2 on STAT Signalling in the Growth Plate**

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#### **P009**

##### **Matrix mineralisation: A driver for osteocytogenesis?**

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#### **P010**

##### **Biochemical characterization of Indian Hedgehog mutations associated with Brachydactyly Type A1 and Acrocapitofemoral Dysplasia**

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#### **P011**

##### **Intra-uterine growth velocities of fetal abdominal circumference and femur length differentially predict bone size and volumetric density at 4 years**

*NC Harvey<sup>1</sup>, PA Mahon<sup>1</sup>, SM Robinson<sup>1</sup>, CE Nisbet<sup>1</sup>, MK Javaid<sup>2</sup>, SR Crozier<sup>1</sup>, HM Inskip<sup>1</sup>, KM Godfrey<sup>1</sup>, EM Dennison<sup>1</sup>, C Cooper<sup>1</sup>*

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#### **P012**

##### **MATERNAL DIETARY PATTERNS DURING PREGNANCY AND CHILDHOOD BONE MASS: A LONGITUDINAL STUDY**

*Z Cole<sup>1</sup>, C Gale<sup>1</sup>, MK Javaid<sup>1</sup>, SM Robinson<sup>1</sup>, C Law<sup>2</sup>, B Boucher<sup>3</sup>, SR Crozier<sup>1</sup>, KM Godfrey<sup>1</sup>, EM Dennison<sup>1</sup>, C Cooper<sup>1</sup>*

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#### **P013**

##### **Early growth only partially predicts fetal skeletal size in late pregnancy.**

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#### **P014**

##### **Musculoskeletal injury and disease – potential answers from development?**

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### **P015**

#### **Pseudoachondroplasia resulting from a C-terminal COMP mutation is associated with a mild myopathy and abnormal changes in tendon and ligament**

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### **P016**

#### **Novel chondroitin sulphation motif expression delineates specific regions of musculoskeletal tissue differentiation in early human and chick limb development.**

*S Li<sup>1</sup>, A Bartlett<sup>1</sup>, AJ Hayes<sup>1</sup>, J Melrose<sup>2</sup>, S Smith<sup>2</sup>, CB Little<sup>2</sup>, CE Hughes<sup>1</sup>, B Caterson<sup>1</sup>*

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### **P017**

#### **Temporal and Spatial Expression of MMP-14 During Endochondral Ossification in Mice.**

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### **P018**

#### **Beukes Hip Dysplasia segregates with a mutation identified in the *UFM1-specific peptidase 2* gene, *UFSP2*.**

*CM Watson<sup>1</sup>, P Beighton<sup>2</sup>, R Ramesar<sup>2</sup>, JBJ van Meurs<sup>3</sup>, R Donn<sup>4</sup>, G Wallis<sup>1</sup>*

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### **P019**

#### **Chondroitin sulphation motifs identify putative chondroprogenitor cells in human osteoarthritic cartilage for use in ACT technologies.**

*S Mukhopadhyay<sup>2</sup>, S Li<sup>1</sup>, AJ Hayes<sup>1</sup>, CE Hughes<sup>1</sup>, MA Nowell<sup>2</sup>, B Caterson<sup>1</sup>*

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### **P020**

#### **Fracture Healing in GDF-5 Deficient Mice**

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#### **P021**

**Expansion on a hyaluronan coated surface enhances the chondrogenic potential of human mesenchymal stem cells.**

*C Ryan<sup>1</sup>, C Coleman<sup>1</sup>, M Murphy<sup>1</sup>, F Barry<sup>1</sup>*

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#### **P022**

**Clonal Mesenchymal Stem Cell Populations Derived From the Synovial Fat Pad Exhibit a Similar Cell Surface Characterisation Profile but Variable Osteogenic and Chondrogenic Differentiation Potential**

*WS Khan<sup>1</sup>, SR Tew<sup>1</sup>, A Adesida<sup>1</sup>, JG Andrew<sup>1</sup>, TE Hardingham<sup>1</sup>*

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#### **P023**

**Evaluation of Bone Marrow Mesenchymal Stem Cell Therapy for Tendon Regeneration in a Large Animal Model**

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#### **P024**

**The role of Ceramide in programmed cell death and autophagy in osteoblasts**

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#### **P025**

**Protection of osteocytes and osteoblasts from apoptosis by bisphosphonates**

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#### **P026**

**Lactoferrin protects osteoblasts and osteocytes from apoptosis**

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**P027**

**A novel *in vitro* bone callus model for distraction osteogenesis**

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**P028**

**Effects of Chemotherapy, Infection, and Bisphosphonates on Osteocytes in Relation to the Development of Osteonecrosis (ON) During the Treatment for Childhood Acute Lymphoblastic Leukaemia (ALL)**

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**P029**

**The PPAR  $\alpha$  agonist rosiglitazone reverses the persistent fibrotic phenotype of scleroderma fibroblasts**

*X Shi-wen*<sup>1</sup>, *M Eastwood*<sup>2</sup>, *CP Denton*<sup>1</sup>, *A Leask*<sup>3</sup>, *DJ Abraham*<sup>1</sup>

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**P030**

**Thrombospondin 1 – a key mediator of matrix contraction depend on MEK/ERK in SSc pathogenesis**

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**P031**

**The Wiskott-Aldrich syndrome protein verprolin homologous (WAVE) 1 is essential to localize MT1-MMP at the leading edge of migrating cells**

*BK Wolters*<sup>1</sup>, *K Sato-Kusubata*<sup>2</sup>, *N Ito*<sup>1</sup>, *S Suetsugu*<sup>3</sup>, *T Takenawa*<sup>4</sup>, *Y Itoh*<sup>1</sup>

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**P032**

**Spatial regulation of MT1-MMP controls tubulogenesis of epithelial cells in a 3D collagen matrix**

*S Bird-Weaver*<sup>1</sup>, *B Wolters*<sup>1</sup>, *N Ito*<sup>1</sup>, *Y Itoh*<sup>1</sup>

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**P033**

**CTGF plays a pivotal role in Lung Fibrosis through the MAPK Dependent Activation of Collagen Type I**

*M Ponticos<sup>1</sup>, X Shi-wen<sup>1</sup>, K Khan<sup>1</sup>, P Leoni<sup>1</sup>, GE Lindah<sup>1</sup>, DJ Abraham<sup>1</sup>*

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**P034**

**Structural and regulatory components of the pericellular matrix of young and mature articular cartilage.**

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**P035**

**Connective Tissue Growth factor: matrix localisation, regulation and possible function in articular cartilage.**

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**P036**

**Positional identity gene expression in MSCs isolated from different bones**

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**P037**

**Osteoblasts isolated from different anatomical locations display similar characteristics *in vitro***

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**P038**

**Positional identity gene expression in osteoblasts isolated from distinct anatomical sites**

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**P039**

**The Role of Glutamate Transporters in Osteoblast Proliferation and Activity**

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**P040**

**The effect of Cobalt(II) and Chromium(VI) on the proliferation and activity of SaOS-2 osteoblast cells *in vitro*.**

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#### **P041**

##### **A role for TRPV1 and K<sup>+</sup> channels in the regulation of osteoblast transdifferentiation to adipocytes**

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#### **P042**

##### **TRPV1b is expressed and may assist in pH 'switching' of human osteoblasts**

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#### **P043**

##### **The expression of ecto-nucleotidases by osteoblasts: the regulatory role of acid**

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#### **P044**

##### **Purinergic agonists synergise with gut hormones, including GIP, to induce expression of c-fos in osteoblastic cells**

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#### **P045**

##### **Adenosine receptor expression and function as mesenchymal stem cells differentiate to osteoblasts**

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#### **P046**

##### **Modulation of A1, A2a and A2b Adenosine Receptor Expression and Function as Osteoblasts Differentiate to Adipocytes**

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**P047**

**Modulation of intracellular trafficking in osteoblasts by TGF $\beta$**

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**P048**

**AMP-activated protein kinase (AMPK) activation in osteoblasts regulates bone cell differentiation and in vitro bone formation**

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**P049**

**ATPase activity and ATP release in osteoblast cultures**

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<sup>2</sup> Department of Engineering Materials Kroto Research Institute Broad Lane University of Sheffield, Sheffield, S2 7HQ, United Kingdom

**P050**

**Regulation of osteoblast function and bone mineralisation by extracellular nucleotides: the role of P2X receptors**

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**P051**

**Targeting of Fibroblast Growth Factor to Hydroxy Apatite for Bone Formation**

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**P052**

**Osterix is Required for Bone Formation and Maintenance in Postnatal Period \***

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**P053**

**Calcium-induced secretion of DKK-1 in osteoblastic cells**

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**P054**

**CCN mRNA expression during osteoclast and osteoblast differentiation.**

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**P055**

**Mild hypothermia promotes osteoclastogenesis whilst retarding osteoblast differentiation and bone formation.**

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**P056**

**Osteoclast function is essential in the hematopoietic stem cell niche**

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**P057**

**Novel Technology to Provide an Enriched Therapeutic Cell Concentrate from Bone Marrow Aspirate**

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**P058**

**Protection against glucocorticoid-induced ROS generation and Forkhead-mediated damage response in human tenocytes**

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**P059**

**Matrix genes show a different pattern of expression in functionally distinct equine tendons**

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**P060**

**Mechanical strain modulation of Matrix Metalloproteinases in human tenocytes**

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**P061**

**LOVASTATIN UPREGULATES CHONDROCYTE MARKER EXPRESSION IN TENOCYTES**

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**P062**

**Evidence for differential regulation of proteoglycans and collagen in response to cyclical strain in tendon**

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**P063**

**Altered gene expression in fibroblasts cultured in 3-D collagen lattices subjected to biomechanical load.**

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**P064**

**FGF receptor-dependent, integrin-independent phosphorylation of p38, JNK and ERK MAPKs following mechanical stimulation of human articular chondrocytes in primary monolayer cell culture.**

*Y Zhou<sup>1</sup>, C Beadle<sup>1</sup>, DM Salter<sup>1</sup>, G Nuki<sup>1</sup>*

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**P065**

**Mechanical loading of murine knee joints: determining the interplay between genetics and mechanical loading in the development of OA.**

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**P066**

**Molecular response of articular cartilage to injury: Wnt signaling in an in vivo model of joint surface injury**

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**P067**

**The Metaphyseal Index for Assessing Development of the Distal Radius**

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**P068**

**Profile analysis of metaphyseal trabecular bone reveals a bimodal dose-dependent response to administered bone active agents**

*A Pitsillides<sup>2</sup>, PL Salmon<sup>1</sup>, A Tivesten<sup>3</sup>, S Moverare<sup>3</sup>, C Ohlsson<sup>3</sup>, L Oste<sup>4</sup>, G Dixon<sup>4</sup>, I Grieg<sup>5</sup>, A Idris<sup>5</sup>, R Van T'Hof<sup>6</sup>, et al.*

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**P069**

**THE OSTEOGENIC RESPONSE TO APPLIED MECHANICAL LOADING IS RESTRICTED TO DISTAL REGIONS OF THE FIBULA CORTEX**

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**P070**

**Short bouts of dynamic compressive loading stimulate mineralized matrix production by human mesenchymal stem cells (hMSC) on 3-D polyurethane scaffolds**

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**P071**

**eNOS null osteoblasts produce Nitric Oxide in response to fluid flow but do not translocate  $\beta$ -catenin**

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**P072**

**Mechanical and material properties of bone in cannabinoid receptor knockout mice**

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**P073****Visualization of Blood Vessels using High Definition X-ray Microtomography**

*K Tang<sup>1</sup>, G Davis<sup>1</sup>, F Ahmed<sup>1</sup>, S Mohsin<sup>1</sup>*

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**P074****Molecular interactions of ADAMTS-4 in the VEGFR2 signalling complex**

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<sup>2</sup> Microcirculation Research Group Academic Unit of Surgical Oncology School of Medicine and Biomedical Sciences University of Sheffield, Sheffield, S10 2RX, United Kingdom

**P075****Neo-cartilage grafts derived from deep and surface zone chondrocytes display unique matrix characteristics yet secrete a consistent profile of angiogenic regulatory proteins**

*C Clarkin<sup>1</sup>, B Poulet<sup>1</sup>, C Hughes<sup>2</sup>, J Edwards<sup>3</sup>, C Wheeler-Jones<sup>1</sup>, B Caterson<sup>2</sup>, A Pitsillides<sup>1</sup>*

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**P076****Anti-angiogenic properties of proteoglycan in cartilage explant cultures**

*JJ Bara<sup>1</sup>, S Roberts<sup>1</sup>, WEB Johnson<sup>1</sup>*

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**P077****The effect of serum and IGF-1 on pH homeostasis in articular chondrocytes in hypoxia**

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**P078****Functional Imaging of Tendon Extracellular Matrix**

*AK Harvey<sup>1</sup>, HR Cornell<sup>2</sup>, PA Hulley<sup>2</sup>, LE Cochlin<sup>3</sup>, U Tirlapur<sup>1</sup>, Z Cui<sup>1</sup>, M Brady<sup>1</sup>, MS Thompson<sup>1</sup>*

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**P079**

***In Situ* Ultrastructural Imaging of Native Extracellular Matrix Macro-Molecules**

*HK Graham*<sup>1</sup>, *CEM Griffiths*<sup>1</sup>, *NW Hodson*<sup>2</sup>, *JA Hoyland*<sup>1</sup>, *J Millward-Sadler*<sup>1</sup>, *AW Trafford*<sup>1</sup>,  
*REB Watson*<sup>1</sup>, *MJ Sherratt*<sup>1</sup>

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**P080**

**Imaging early molecular alterations in articular cartilage degeneration by Raman spectroscopy: diagnostic applications**

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**P081**

**Apoptosis in Anteromedial Gonarthrosis - evidence for the role of Reactive Oxygen Species**

*R Rout*<sup>1</sup>, *S McDonnell*<sup>1</sup>, *S Snelling*<sup>1</sup>, *X Dao*<sup>1</sup>, *AJ Price*<sup>1</sup>, *PA Hulley*<sup>1</sup>

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**P082**

**Knockout of P58<sup>IPK</sup>, a known inhibitor of PKR, in mice results in a degenerative phenotype in the knee joint.**

*SJ Gilbert*<sup>1</sup>, *M Patel*<sup>1</sup>, *H Toumi*<sup>1</sup>, *VC Duance*<sup>1</sup>, *DJ Mason*<sup>1</sup>

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**P083**

**Glutamatergic signalling in the osteoarthritic knee**

*DJ Mason*<sup>1</sup>, *K Brakspear*<sup>1</sup>, *C Wilson*<sup>2</sup>, *R Williams*<sup>2</sup>, *RS Kotwal*<sup>2</sup>

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**P084**

**A gene expression profile of damaged versus undamaged cartilage in Anteromedial Gonarthrosis**

*R Rout*<sup>1</sup>, *S Snelling*<sup>1</sup>, *X Dao*<sup>1</sup>, *AJ Carr*<sup>1</sup>, *PA Hulley*<sup>1</sup>, *AJ Price*<sup>1</sup>

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**P085**

**Two types of chondro-osseous developmental defects in adjacent sites within the same joint in young horses**

*EC Firth*<sup>1</sup>, *M Doube*<sup>2</sup>, *A Boyde*<sup>2</sup>

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**P086**

**Histone deacetylase inhibitors as chondroprotective agents**

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**P087**

**Dietary histone deacetylase inhibitors as chondroprotective agents**

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**P088**

**Involvement of NMDAR in chondrocyte cell death and matrix degeneration.**

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**P089**

**The MEK-ERK Signalling Pathway Plays a Role in SOX9 Gene Expression in Human Articular Chondrocytes**

*MJ Peffers<sup>1</sup>, SR Tew<sup>1</sup>, PI Milner<sup>1</sup>, PD Clegg<sup>1</sup>*

<sup>1</sup> University of Liverpool, Liverpool, Liverpool, L69 7ZJ, United Kingdom

**P090**

**Hyperosmotic stimulation of chondrocytes leads to differential post transcriptional regulation of SOX9 and COL2A1 mRNA: potential role for the RNA binding proteins TTP and AUF1?**

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**P091**

**Mir-675 regulates collagen II levels in human articular chondrocytes.**

*K Dudek<sup>1</sup>, JE Lafont<sup>1</sup>, CL Murphy<sup>1</sup>*

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**P092**

**CXCR1/2 signalling in the phenotypic stability of in vitro expanded adult human articular chondrocytes**

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**P093**

**Effects of the modulation of Wnt-canonical pathway on the phenotypic stability of human articular chondrocytes**

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**P094**

**Promotion of Chondrocyte Function by Inhibition of HIF-specific Hydroxylases**

*BL Thoms<sup>1</sup>, JE Lafont<sup>1</sup>, CL Murphy<sup>1</sup>*

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**P095**

**TGFβ1-Mediated Collagen Biosynthesis in Articular Chondrocytes is Dependent on an Intact Microtubular Network**

*EJ Blain<sup>1</sup>, SJ Gilbert<sup>1</sup>, VC Duance<sup>1</sup>*

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**P096**

**Identification and characterisation of microRNAs involved in chondrogenesis and osteoarthritis.**

*TE Swingler<sup>1</sup>, T Dalmay<sup>1</sup>, DA Young<sup>2</sup>, RP Boot-Handford<sup>3</sup>, E Crawford<sup>3</sup>, IM Clark<sup>1</sup>*

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**P097**

**The Organization of Microfibrils and Elastin Fibres within the Canine Cruciate Ligament Complex**

*KD Smith<sup>1</sup>, A Vaughan-Thomas<sup>1</sup>, PD Clegg<sup>1</sup>, D Spiller<sup>2</sup>, JF Innes<sup>1</sup>, EJ Comerford<sup>1</sup>*

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**P098**

**The Elastic Network in Human Articular Cartilage: An Immunohistochemical Study of Elastin Fibres and Microfibrils**

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**P099**

**Echinoderms display key features of vertebrate decoran-collagen fibril interactions despite their lack of genomic decoron**

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**P100**

**Behaviour of enamel following a short duration acid exposure**

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**P101**

**Breast cancer-bone marrow stromal cell interactions modify expression of proteolytic enzymes and regulators of bone turnover**

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**P102**

**Regulation and functional analyses of MMP-28**

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**P103**

**S100A4 Expression in Fibrostenosing Crohn's Disease: Evidence for a Role in T-Lymphocytes and Fibroblasts but Not in Epithelial-Mesenchymal Transition.**

*NG Docherty<sup>1</sup>, MF Cunningham<sup>1</sup>, T Toivonen<sup>2</sup>, DC Cottell<sup>2</sup>, JP Burke<sup>1</sup>, PR O'Connell<sup>1</sup>*

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**P104**

**Proteolytic Fragments of Tenascin-C Promote Cartilage Degradation**

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**P105**

**Metabolism of Intervertebral Disc Explants in the Presence of a Fibronectin Fragment**

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**P106**

**Denting the image of bone**

*A Boyde<sup>1</sup>*

<sup>1</sup> Queen Mary University of London, Centre for Oral Growth and Development, Dental institute, London, E1 1BB, United Kingdom

**P107**

**Role of Elastic Fibres at the Bone Growth and Bone Remodelling: An Immunohistochemical Study of Elastin Expression at the Spinal Vertebral Bone**

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<sup>1</sup> Department of Physiology Anatomy and Genetics, Sherrington Building Parks Road, University of Oxford, Oxford, OX1 3PT, United Kingdom

**P108**

**Expression of Type VI Collagen  $\alpha$  3 Chain Inversely Correlates with the Maturity of Bone**

*P Wilson<sup>1</sup>, B Wlodarski<sup>1</sup>, J Dillon<sup>1</sup>, S Wagstaff<sup>1</sup>, W Fraser<sup>2</sup>, J Gallagher<sup>1</sup>*

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**P109**

**Self-organisation and protein localisation using a clay-based gel for skeletal tissue engineering**

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**P110**

**Application of Biofunctional Polymer Blends in Strategies for Cell Manipulation and Skeletal Tissue Engineering**

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**P111**

**Ultrastructural studies on the binding of ochronotic pigment to collagen fibres in cartilage and bone *in vivo* and *in vitro***

*AM Taylor<sup>1</sup>, WD Fraser<sup>2</sup>, PJM Wilson<sup>1</sup>, LR Ranganath<sup>2</sup>, JA Gallagher<sup>1</sup>*

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**P112**

**Role of LIGHT and its Decoy Receptor, DcR3, in Joint Destruction**

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**P113**

**Title: Non-steroidal anti-inflammatory drugs are associated with osteoporotic fractures: a population-based analysis.**

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<sup>2</sup> Department of Medicine University of Manitoba,

**P114**

**STAT3 is Required for Monocyte Derived Macrophages to Promote Osteoblast Differentiation**

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**P115**

**Genetic variation in *RANK* and *OPG* is associated with bone turnover and bone mineral density: Results from the European Male Ageing Study**

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**P116**

**TSG-6 Acts in Synergy with OPG to Inhibit Osteoclastic Bone Resorption**

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**P117**

**The Effect of Osteoclastogenic Growth Factors on Osteoclast Resorptive Activity in Giant Cell Tumour of the Bone**

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**P118**

**IL-6 MODULATES THE SKELETAL RESPONSE TO GLUCOCORTICIDS DURING A RELAPSE OF INFLAMMATORY BOWEL DISEASE**

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**P119**

**Soluble Rank Ligand Produced by Myeloma Cells Contributes to Generalised Bone Loss in Multiple Myeloma.**

*CH Buckle<sup>1</sup>, E De Leenheer<sup>1</sup>, MA Lawson<sup>1</sup>, JM Hough<sup>1</sup>, KL Yong<sup>2</sup>, N Rabin<sup>2</sup>, K Vanderkerken<sup>3</sup>, PI Croucher<sup>1</sup>*

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<sup>3</sup> Department of Haematology and Immunology Vrije Universiteit Brussel(VUB), Brussels, BI 090, Belgium

**P120**

**Profound changes in mesenchymal progenitors and bone properties in IL1ra<sup>-/-</sup>, a mouse model of rheumatoid arthritis.**

*S Mohanty<sup>1</sup>, L Zacharias<sup>1</sup>, A Gambardella<sup>1</sup>, M Nicklin<sup>1</sup>, L Coulton<sup>1</sup>, G Wilson<sup>1</sup>, PI Croucher<sup>1</sup>, I Bellantuono<sup>1</sup>*

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**P121**

**Biomechanical enhancement of impaction bone grafting using skeletal stem cells, hydroxyapatite nanoparticle coated skeletal stem cells and collagen coated allograft.**

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**P122**

**Osteoclast defects in XLA patients are negated by lack of mature B-cells and elevated inflammatory cytokine production**

*L Danks<sup>1</sup>, S Workman<sup>2</sup>, V Nicolaidou<sup>1</sup>, D Webster<sup>2</sup>, B Foxwell<sup>1</sup>, N Horwood<sup>1</sup>*

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**P123**

**Monocytes control Mesenchymal Stem Cell Differentiation towards Osteoblasts**

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**P124**

**The effect of doxorubicin and zoledronic acid on DKK1 expression in breast cancer bone metastases in vitro and in vivo**

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**P125**

**Free and open source software for bone image visualisation and analysis**

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**P126**

**ASSESSMENT OF FRACTURE RISK IN FEMALE RHEUMATOID PATIENTS USING THE FRAX® TOOL**

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**P127**

**Positive correlations between micronutrient status and indices of bone health in young female gymnasts: impact on PBM attainment**

*E Alshammari<sup>1</sup>, JA Nurmi-Lawton<sup>1</sup>, S Shafi<sup>1</sup>, A Taylor<sup>1</sup>, GAA Ferns<sup>2</sup>, SA Lanham-New<sup>1</sup>*

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#### **P128**

##### **Reduction of fracture incidence in laying hens fed an n-3 diet: Preliminary bone biomechanical and biochemical data.**

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#### **P129**

##### **Females With Turner's Syndrome Have A Reduction In Cortical Bone Density With Preservation Of Trabecular Bone Density.**

*C Holroyd<sup>1</sup>, P Taylor<sup>2</sup>, C Rivett<sup>2</sup>, K Jameson<sup>1</sup>, J Davies<sup>3</sup>, C Cooper<sup>1</sup>, E Dennison<sup>1</sup>*

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#### **P130**

##### **Increased fat mass and reduced serum osteocalcin in individuals with High Bone Mass: possible cross-talk between fat and bone metabolism**

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#### **P131**

##### **MEASUREMENT OF 25-HYDROXY VITAMIN D USING THE NEW IDS-iSYS AUTOMATED SYSTEM.**

*L A Bage<sup>1</sup>, C E Wynn<sup>1</sup>, C Arrowsmith<sup>1</sup>, S Middlemist<sup>1</sup>, C Dixon<sup>1</sup>, A K Barnes<sup>1</sup>, M L Garrity<sup>1</sup>*

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#### **P132**

##### **Relationship between body mass index (BMI) and vitamin D status in post-menopausal osteoporosis**

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**P133**

**Influences of Vitamin D Status and Parathyroid Hormone on Bone Health in Southern UK Premenopausal women: Preliminary results from the D-FINES study**

*A.L. Darling<sup>1</sup>, P.A. Lee<sup>1</sup>, A. Osborn<sup>1</sup>, F.K. Hanjra<sup>1</sup>, S. Patel<sup>2</sup>, R. Gray<sup>3</sup>, J. Nurmi-Lawton<sup>1</sup>, W.T.K. Lee<sup>1</sup>, J.L. Berry<sup>4</sup>, S.A. Lanham-New<sup>1</sup>*

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**Abstract withdrawn**

**P135**

**Audit of osteoporotic hip fracture management in a Foundation Trust Hospital: Our compliance with current British Orthopaedic Association guidelines**

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**P136**

**A proteomic analysis of the effects of MMP23 over-expression in chondrosarcoma (SWI353) cells.**

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**P137**

**Hydroxyapatite in Human Blood and its Participation in Mineralization of the Tissues of an Organism**

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<sup>3</sup> Zaikovskii Boreskov Institute of catalysis of SB RAS Russia, Novosibirsk, 630090, Russia

**CC5**

**Hypophosphatasia and Inflammatory Arthritis: Associated Conditions or a Coincidence?**

C R Holroyd, S C Earl, E M Dennison. MRC Epidemiology Resource Centre, Southampton, SO16 6YD.

**CC6**

**Acute bone pain after commencing strontium ranelate and raloxifene for osteoporosis**

N Sofat, C Mackworth-Young

Department of Rheumatology, Charing Cross Hospital, Imperial College London

**CC7**

**Cyclical intravenous Pamidronate therapy improved symptoms of bone pain in a girl with Geroderma Osteodysplasticum**

*M Z Mughal<sup>1</sup>, J E Adams<sup>2</sup>, J Clayton-Smith<sup>3</sup> & A J Freemont<sup>4</sup>*

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<sup>4</sup>Laboratory & Regenerative Medicine, University of Manchester, UK.

**CC8**

**Pregnancy, Lactation and Crumbling Columns**

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